REMARKS

Applicants acknowledge with appreciation the indication that claims 3-4 and 10-11 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have amended claims to more particularly define the invention taking into consideration the outstanding Official Action.

Claims 1-9 have been canceled from the application without prejudice or disclaimer. Claim 10 has been amended to include the mixture from claim 3 and for purposes of clarification as fully supported by the specification as originally filed. These amendments restrict claim 10 to the allowable subject matter and places claim 10 in condition for allowance. Claims 11-14 have been amended for purposes of clarification and to be consistent with claim amended claim 10. These claims are dependent on allowable claim 10 and should also be allowable. Clearly, claims 10-14 are in condition for allowance and early notification thereof is most respectfully requested.

New claims 15 to 17 have been added to the application as fully supported by the specification as originally filed. In this regard, the Examiner's attention is most directed to the specification at pages 9-10, 14 and 16 for the ratios as set forth in the newly added claims. Applicants most respectfully submit that all of the claims now present in the application are in full compliance with 35 U.S.C. 112 and are clearly patentable over the references of record.

Applicants have carefully reviewed the Examiner's Office Action dated November 28, 2005, in which the Examiner rejected claim 1 under either 35 U.S.C. 102(b) as being anticipated by JP 02-120389. This rejection has been carefully considered but is most respectfully traversed in view of the cancellation of this claim and the newly added product claims. Accordingly, it is most respectfully requested that this rejection be withdrawn.

This is similarly true for the rejection under 35 U.S.C. 102(e) as being anticipated by Mueller et al. (US Patent No. 6,686,691). Accordingly, it is most respectfully requested that this rejection be withdrawn.

The rejection of claims 1-2 and 5-7 under 35 U.S.C. 103(a) as being unpatentable over deSouza (US patent No. 4,684,353) has been carefully considered but is most respectfully traversed in view of the amendments to the claims.

The rejection of claims 1-2, 5-9 and 12-14 under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. (US patent No. 5,789,856) in view of deSouza, has been carefully considered but is most respectfully traversed.

Applicants wish to direct the Examiner's attention to the basic requirements of a prima facie case of obviousness as set forth in the MPEP § 2143. This section states that to establish a prima facie case of obviousness, three basic criteria first must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Section 2143.03 states that all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicants also most respectfully direct the Examiner's attention to MPEP § 2144.08 (page 2100-114) wherein it is stated that Office personnel should consider all

rebuttal argument and evidence presented by applicant and the citation of In re Soni for error in not considering evidence presented in the specification.

Applicants have added new claims 15-17 in order to more clearly define the claimed subject matter without introducing new matter and in full compliance with the statutory requirements.

The present invention relates to a phosphor for a low energy electron beam driven by a low anode voltage and a vacuum fluorescent display using same. In this regard, newly added claims 15-17 relate to mixture phosphors for use in a fluorescent display device including a phosphor of a red luminous color devoid of Cd and a phosphor of a green family luminous color devoid of Cd, wherein the phosphor mixture emits light of a warm luminous color at an anode voltage of 100V or below.

Specifically, claim 15 relates to an embodiment of a mixture phosphor in accordance with the present invention, wherein the phosphor of the green family luminous color is ZnS:Cu,Al phosphor or ZnS:Au,Al phosphor, and a mixing ratio of the phosphor of the green family luminous color is about 5 to about 70wt% of the mixture phosphor. Further, claim 16 relates to another embodiment of a mixture phosphor in accordance with the present invention, wherein the phosphor of the green family luminous color is ZnS:Cu,Au,Al phosphor, and a mixing ratio of the phosphor of the green family luminous color is about 5 to about 50wt% of the mixture phosphor. Furthermore, claim 17 relates to still another embodiment of a mixture phosphor in accordance with the present invention, wherein the phosphor of the green family luminous color is ZnGa2O4:Mn phosphor, and a mixing ratio of the phosphor of the green family luminous color is about 5 to about 50wt% of the mixture phosphor.

None of the prior art references cited by the Examiner, alone or in combination teaches or suggests the above features of the present invention, which is that the phosphor mixture emits light of a warm luminous color at an anode voltage of 100V or below; and that the phosphor of the green family luminous color is ZnS:Cu,Al or ZnS:Au,Al phosphor, ZnS:Cu,Au,Al phosphor, or ZnGa2O4:Mn phosphor. Accordingly,

it is respectfully submitted that newly added claims 15-17 are allowable in their present forms.

Applicants believe that this is a full and complete response to the Office Action. For the reasons discussed above, Applicants now respectfully submit that the pending claims are in complete condition for allowance. Accordingly, it is respectfully requested that the Examiner's rejections be withdrawn; and that claims 10-17 be allowed in their present form.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, it is most respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case be passed to issue.

Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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February 28, 2006